

REMARKS

Prior claims 25 and 27-30 were rejected under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter of the invention. In particular, it is asserted that claim 25 recites that the coupler has a "hub rotatably coupling said detachable winding assembly to said tool adapter"; however, it is further asserted that this coupling is fixed so as to transmit rotation from the winding assembly to the tool adapter.

Initially, Applicants are uncertain as to the basis of this objection, inasmuch as it seems the hub of the coupler is necessarily fixed so as to rotatably couple the detachable winding assembly and the tool adapter. Claim 25 has been amended to recite that the coupler has a "fixed" hub to rotatably couple the detachable winding assembly and the tool adapter. Should this amendment not resolve the indefiniteness objection, Applicants would welcome a proposed solution by the Examiner, as this issue is not deemed to be significant in defining the scope of the instant invention.

On the substantive merits, claims 25 and 27-30 are rejected under 35 U.S.C. § 102 as anticipated by the Dorma reference. In particular, it is asserted that Fig. 13 of Dorma shows a tool adapter 41, winding assembly 128, first gear 137, hub 141, 142 and second gear 147 which engages first gear 137 indirectly through gears 152, etc. or alternatively, directly (col. 6, lines 34-37) with the housing having external portions, any of which may be considered a stop. Under 35 U.S.C. § 103, the Official Action indicates that claims 25 and 27-30 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over Dorma. In that regard, the engagement of the first and second gears, while indirect as stated above, would have been obvious as a modification to Dorma, whereby the worm gear directly engages gear 137 so as to reduce parts.

Claim 25 recites a tool adapter adapted to be positioned at and engage an axial end of the counterbalance system. In the rejection set forth above, the tool adapter is said in the Office Action to find response in the collar or hub 41 to which one end of Dorma's spring 38 is attached. The Dorma patent structure cannot respond to this claim terminology since the collars 41,44 cannot be positioned at the end of the shaft 27 outwardly of the support blocks 28 and 29. This is because the support blocks 28 and 29 would necessarily interfere with the springs 38. Thus, the Dorma patent does not have a tool adapter adapted to be positioned at and engage an axial end of the counterbalance system.

In response to Applicants' prior arguments, the Official Action contends that claim 25 requires only that the tensioning apparatus be capable of engaging the end of the counterbalance mechanism, and Dorma is thus capable. In this respect, it is to be noted that even the power apparatus 46 of the Dorma patent does not contemplate being positioned at or engaging the axial end of the counterbalance system, or any portion thereof, axially outwardly of the support blocks 28 and 29. The Dorma patent teaches only the use of the power apparatus 46 to engage and rotate the collars 41, 44 relative to shaft 42, which are necessarily axially interiorly of the support blocks 28 and 29 to adjust the tension in spring 38. The Examiner's suggestion that Dorma could engage the axial end of counterbalance system or shaft 27 is not present in the Dorma disclosure, but found only in the Applicants' own disclosure. Further, it is to be noted that were the power apparatus 46 of Dorma to engage the end of the counterbalance system, *i.e.*, the shaft 27, such would not result in the possibility of adjusting tension in the spring 38. Rather, the collar 41 of the Dorma patent must be rotated relative to shaft 27 to effect adjustment of the torsion spring 38. Applicants' placement of the tool adapter and its engagement by the winding assembly is thus clearly not taught nor suggested by the Dorma patent.

The ability to adjust tension in the counterbalance system laterally outwardly of the end of the counterbalance system is, of course, significant in the practical context of installation and adjustment of the door system. As has been previously indicated in detail, it is thus possible with Applicants' invention, as claimed, to adjust the tension in the counterbalance system independent of the position of the door. Significantly, the tension may be adjusted with the door in the open position where there is a minimum tension in the counterbalance springs or with the door closed or in any position therebetween. In contrast, the Dorma patent permits tension adjustment only when the door is in the closed position, with maximum tension in the counterbalance system springs. This is because the power apparatus in the Dorma patent contacts and effects adjustment to the collars 41, 44 of the counterbalance springs that are located substantially inwardly of the counterbalance shaft ends and are thus inaccessible when the door is in the open position. The Dorma patent arrangement requires an elaborate, high mechanical advantage gear train to develop the necessary torsional power. Further, just as in any counterbalance system, final adjustments to a door system installation require an installer to mechanically lift the door and determine

that the counterbalance tension is precisely accurate to effect the requisite counterbalance action. In the use of the Dorma device, after an approximate adjustment to the counterbalance system has been made, it is necessary to lock the collars 41, 44 to the drive shaft, remove the power apparatus 46, climb down from the ladder, and move the door to test the counterbalance effect. With the Dorma device, it is then necessary to again close the door, climb the ladder and make arbitrary further adjustment of collars 41 and 44 to endeavor to achieve the precise counterbalance force required. This same sequence must be repeated until the precise required balance is achieved. Applicants' invention allows the tension to be adjusted laterally outwardly of the door without need for installing and removing the detachable winding assembly and without ascending and descending a ladder multiple times to effect final adjustment of the counterbalance forces on the door installation.

Claim 25 has also been amended to indicate that the first gear is "circumferentially continuous", which structurally distinguishes over the various embodiments of the Dorma invention where the power apparatus 46 has a radial slot 83 or the like in all embodiments, which allows the power apparatus 46 to slide over the shaft or collar 41, 44 on shaft 27 to effect rotation of collars 41, 44 relative to shaft 27. The Dorma patent can in no way be said to teach or suggest the use of a circumferentially continuous first gear like Applicants' winding assembly because a circumferentially continuous first gear cannot be operable in the context of the Dorma patent, where the first gear 137 needs to be slotted to accommodate shaft 27 and/or collars 41, 42. Thus, Applicants' invention, as presently claimed in independent claim 25, patentably distinguishes in multiple respects over the Dorma patent.

Dependent claims 27-30, inclusive, also recite features patentably distinguishing the Dorma patent. For example, claim 27 recites a second stop surface on an opposed side of the housing for engaging a tool adapter at an opposite end of the counterbalance system. Assuming that the handle 51 is the stop surface, as indicated in the specification of Dorma at col. 1, lines 42-45, there is no second stop positioned on an opposed side of the housing from the first stop surface that permits installation of a winding assembly at opposite ends of a counterbalance system. Claim 28 specifies a coupler positioned between the first and second stop surfaces, which is not true in regard to the Dorma patent structural arrangement

because there is no second responsive stop surface. Claims 29 and 30 deal with limitations placing the stop surfaces at an angle to each other and positioning a boss that, as a result of the stop surfaces, extends non-perpendicular to the door frame to enhance operational access with a driver or other tool. The Dorma patent does not in any way have or suggest comparable structure or operational access.

In light of the above amendments to the claims and related comments, favorable action and Notice of Allowance of claims 25 and 27-30 is earnestly solicited. In any event, entry of the instant amendment is requested as placing the application in better condition for appeal.

In the event that a fee required for the filing of this document is missing or insufficient, the undersigned attorney hereby authorizes the Commissioner to charge payment of any fees associated with this communication or to credit any overpayment to Deposit Account No. 18-0987. If a withdrawal is required from Deposit Account No. 18-0987, the undersigned Attorney respectfully requests that the Commissioner of Patents and Trademarks cite Attorney Docket Number **WAY.P.US0097** for billing purposes.

Should the Examiner care to discuss any of the foregoing in greater detail, the undersigned attorney would welcome a telephone call.

Respectfully submitted,



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